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FIG. 1A



1	CGGACCGCTGGCGCGCAGCCTGGCTGACCTGATCCTGGACCAGTGC	CCCCGACCGCGGGCG	60
61	CGCCGGTGCCGCAGATGCTGGCCCAGCCGCAGCGGCTGCTTCATCCTGGACGGCGGG	M <u>Q</u> A Q P Q R L <u>Q</u> F I L D G A D	120 16
121	ACGAGCTGCCGGCGCTGGGGGCCCGAGGCCGCGCCCTGCACAGACCCCTTCGAGGCGG	E L P A L G G P E A A P <u>C</u> T D P F E A A	180 36
181	CGAGCGGCGCGCGGGTGCTAGGCGGGCTGCTGAGTAAGGCGCTGCTGCCACGGCCCTCC	S G A R V <u>Q</u> G G <u>Q</u> S K A L <u>Q</u> P T A L L	240 56
241	TGCTGGTGACCACGCGCGCCGCCGCCCCGGAGGGCTGCAGGGCCGCCTGTGTTCCCCGC	<u>Q</u> V T T R A A A P G R <u>Q</u> G R L C S P Q	300 76
301	AGTGCGCCGAGGTGCGCGGCTTCTCCGACAAGGACAAGAAGAAGTATTCTACAAGTTCT	C A E V R G F S D K D K K K Y F Y K F F	360 96
361	TCCGGGATGAGAGGAGGGCCGAGCGCGCCTACCGCTTCGTGAAGGAGAACGAGACGCTGT	R D E R R A E R A Y R F V K E N E T <u>Q</u> F	420 116
421	TCGCCTGTGCTTCGTGCCCTCGTGTGGATCGTGTGCACCGTGCTGCCAGCAGC	A <u>Q</u> C F V P F V C W I V <u>C</u> T V <u>Q</u> R Q Q L	480 136
481	TGGAGCTCGGTGGGACCTGTCGCGCACGTCCAAGACCACCACGTCAGTGTACCTGCTT	E L G R D L S R T S K T T T S V Y <u>Q</u> L F	540 156
541	TCATCACCAAGCGTTCTGAGCTCGGCTCCGTAGCCGACGGGCCCGGTTGCAGGGCGACC	I T S V L S S A P V A D G P R L Q G D <u>Q</u>	600 176
601	TGCGCAATCTGTGCCGCCTGGCCCGAGGGCGTCTCGGACGCGAGGGCCAGTTGCCG	R N <u>Q</u> C R <u>Q</u> A R E G V L G R R A Q F A E	660 196
661	AGAAGGAACCTGGAGCAACTGGAGCTTCGTGGCTCCAAAGTGCAGACGCTGTTCTCAGCA	K E <u>Q</u> E Q L E L R G S K V Q T L F L S K	720 216
721	AAAAGGAGCTGCCGGCGTGGAGACAGAGGTACCTACCAAGTTCATCGACCGAGCT	K E L P G V L E T E V T Y Q F I D Q S F	780 236
781	TCCAGGAGTTCCCTCGCGGACTGTCTACCTGCTGGAGGACGGCGGGTGCCAGGACCG	Q E F L A A L S Y L <u>Q</u> E D G G V P R T A	840 256
841	CGGCTGGCGGGCGTTGGGACACTCCTGCGTGGGACGCCAGCCGCACAGCCACTTGGTGC	A G G V G T L <u>Q</u> R G D A Q P H S H L V L	900 276



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FIG. 1B

901	TCACCA CGCG CCTCT CGGACT GCTG AGCG CGGAG CGGAT GCGC GACAT CGAG CGCC	960
277	T T R F L F G L L S A E R M R D I E R H	296
961	ACTTCGGCTGCATGGTTTCAGAGCGTGTGAAGCAGGAGGCCCTGCGGTGGGTGCAGGGAC	1020
297	F G C M V S E R V K Q E A L R W V Q G Q	316
1021	AGGGACAGGGCTGCCCGGAGTGGCACCAAGAGGTGACCGAGGGGGCAAAGGGCTCGAGG	1080
317	G Q G C P G V A P E V T E G A K G L E D	336
1081	ACACCGAAGAGCCAGAGGAGGGAGGAGGGAGGAGGCCAACTACCCACTGGAGTTGC	1140
337	T E E P E E E E G E E P N Y P L E L L	356
1141	TGTACTGCCTGTACGAGACGCAGGAGGACGCCTTGTGCCTGAAGCCCTGTGCCGGTTCC	1200
357	Y C L Y E T Q E D A F V R Q A L C R F P	376
1201	CGGAGCTGGCGCTGCAGCGAGTGCCTCTGCCGCATGGACGTGGCTTCTGAGCTACT	1260
377	E L A L Q R V R F C R M D V A V L S Y C	396
1261	GGTGAGGTGCTGCCCTGCTGGACAGGCACTGCCTGATCAGCTGCAGATTGGTTGCTG	1320
397	V R C C P A G Q A L R L I S C R L V A A	416
1321	CGCAGGAGAAGAAGAAGAAGAGCCCTGGGAAGCGGCTCCAGGCCAGGCTGGTGGCGCA	1380
417	Q E K K K K S L G K R L Q A S L G G G S	436
1381	GTTCTCAAGGCACCACAAACAATGCCAGCCTCCCTTCTCATCCACTCTTCAGGCAA	1440
437	S Q G T T K Q L P A S L L H P L F Q A M	456
1441	TGACTGACCCACTGTGCCATCTGAGCAGCCTCACGCTGTCCACTGCAAACCTCCCTGACG	1500
457	T D P L C H L S S L T L S H C K L P D A	476
1501	CGGTCTGCCGAGACCTTCTGAGGCCCTGAGGGCAGCCCCCGCACTGACGGAGCTGGCC	1560
477	V C R D L S E A L R A A P A L T E L G L	496
1561	TCCTCCACAACAGGCTCAGTGAGGCCAGCTGAGTGGGCCTAGCCTGG	1620
497	L H N R L S E A G L R M L S E G L A W P	516
1621	CGCAGTGCAGGGTGCAGACGGTCAGGGTACAGCTGCCGTACCCCGAGCGAGGGCTCCAGT	1680
517	Q C R V Q T V R V Q L P D P Q R G L Q Y	536
1681	ACCTGGTGGGTATGCTCGGCAGAGGCCCGCCCTGACCAACCTGGATCTCAGCGGCTGCC	1740
537	L V G M L R Q S P A L T T L D L S G C Q	556
1741	AACTGCCGCCGCCATGGTGACCTACCTGTGTGCAGTCCTGCCAGCACCAAGGGATGCGGCC	1800
557	L P A P M V T Y L C A V L Q H Q G C G L	576



FIG. 1C

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FIG. 2A-1



50

1

HLRSSI1
caspase_recruitment_protein
cryopyrin
Nucleotide_Binding_site

(1) MAGGAWGRILACYLEFLKKKEELKEFQILANKAHSSSSGETPAQPEKTSQG
(1) -MASTRCKKLARYLEDLEDVLDLKKPKMTHLEDYEPQKGCICLPRGQTEKADH
(1) -MGFNLQALLEQISQDELSKFKYLTTESPAEELQKIPHKEVDKADG

51

HLRSSI1
caspase_recruitment_protein
cryopyrin
Nucleotide_Binding_site

(1) MEVASYLVAQYGEQRAMDIAATHWEQMLGRLSCAQEQGAGHSPSFPYSP
(51) VDLATEMLTDENGEERKAWAWNTFAAIIINRRDLYEKAKRDEPKWGSDNARV
(47) KQLVETLTTHCDSYWVEMASTIQMVEKMKHMRMDLSERAKDEVREALKSENK

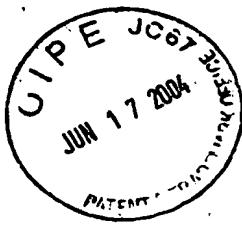
101

HLRSSI1
caspase_recruitment_protein
cryopyrin
Nucleotide_Binding_site

(1) SEPHLGSPSPQPTSTAVLMPWIHELPAGCTQGSERRVLRQLPDTSGRRWRE
(101) SN--
(100) RK--
(97) RK--

100

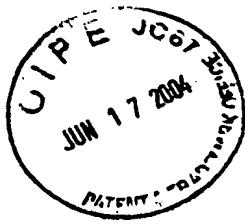
150



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FIG. 2A-2



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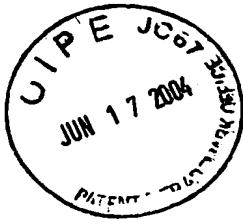
FIG. 2A-3

301 350

HLRSS11	(1)	-
caspase_recruitment_protein	(301)	PDYVEENRGHIEIRDLFGPGIDIQEPRIVELQAGIGKSTLARQWKEA
cryopyrin	(199)	-----SPIKMELLFDPPDEHSEPVETTVEQGAAGTGTKLILARKWMLD
Nucleotide_Binding_site	(172)	-----V1PCPFSNTVVLYGPAGHGGKTTLAQKLMID

351 HLRRS11 (1)
caspase_recruitment_protein (351)
cryopyrin (241)
Nucleotide_Binding_site (202)
400

401	HLRRS11 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	(4) (401) (291) (251)	QPQRILFILDGADELPH-ALGGPPEAAPCTDPFEEAASSGARVIGCILLSKAALLP RPERILFILDGVDEPGMWVLOEPPSSSELCTIENSSOPADALLGSLLGKTTILP KPSRILFLFIMDGFDELQGAFDEHIGPLCTDWQKAERGDDILLSSLIIRKKKLLP QARKILFWVADCFDDELCKAPGALIIEDICGDWEEKKPKVPVWLLGSLLNRVMLP
450			



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FIG. 2A-4

451 HLRSII (53) TALLIVITRAAAPGRLQGRICSPQC_AEV_RGESDIDDKKKYFYK_EFRDERRA
 caspase_recruitment_protein (451) EASEFLLTARITATTAQ_NLIQPSI_EQARWVEVLGFSESSR_KKEYFY_RYFY_FIDERQA
 cryopyrin (341) EASLILITTRPVALERKLQHLLIDHPRHVE_TLGFS_EAKKE_KKEYFY_KYF_SDEAQA
 Nucleotide_Binding_site (301) KAALIMTTRPRALRD_RILAE_PY_RVEGFLEEDK_RAY_FUR_EY_FCD_EDQA

501 HLRRSII (103)
caspase_recruitment_protein (501)
cryopyrin (391)
Nucleotide_Binding_site (351)
550 ERAFREVKENETILFALCFVPEV
TAFRLVKSNKEIWLACILVPAWSM
RAAFSILQENEVLFTMCFIIP
VRAFEFLMRSNAALFQLGSAPAV
VCFWIVCTVIRQQELGRDISKTTTSV
TQWACTCIMQOMKPEKEIILTSKTTTTL
GCKSIAQTSKTTTAV
GEDPVPPTCLTRTG

551 HLRRSII (153)
 caspase_recruitment_protein (551)
 cryopyrin (441)
 Nucleotide_Binding_site (401)
 551 YLFITSVSSAAPVADCPRIQGDDLRNLCRILARECIVLGRRAQFANEKELFQI
 CLHVIQAOALQAOPIQPOLRDLCSSLAAEGIWORKKILFSPDDLRKH
 YMFFLISSILQPERGGSQEHGLCQAHWGLCSSLAAQGTLFQIILFEEESDLRNIH
 ELRFLICSRFP-----QGAQIRGAIRTLGQIWAQTSVWLHIREDLERI
 600

FIG. 2B-1



HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	601 (203) EIRGSKVOTI ELSKKEL PGV TEVY QFIDQS QEF LA ASYL LEDGGV (595) GLD GAII STPL KMG -- FLOEHP PIPL SYSF IHL QFQE FA AMS Y LEDEK -- (491) GLO QKAD VSA NFLRMN -- LEQKE VD GEKF Y SFIHMT FQE FEA AMY YLLEKE (446) GYQ ESD IRL FLGD -- ILRQDR VS IKGCY SFIHLS FQQQFL AE FY T LEKE EE	650 EIRGSKVOTI ELSKKEL PGV TEVY QFIDQS QEF LA ASYL LEDGGV GLD GAII STPL KMG -- FLOEHP PIPL SYSF IHL QFQE FA AMS Y LEDEK -- GLO QKAD VSA NFLRMN -- LEQKE VD GEKF Y SFIHMT FQE FEA AMY YLLEKE GYQ ESD IRL FLGD -- ILRQDR VS IKGCY SFIHLS FQQQFL AE FY T LEKE EE	651 PRT AA GG-- (253) PRT AA GG-- (642) -- (540) GRT NV PG SR K LP SR DV (495) ED RG HT WD I G-- HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	700 VGT LL IR RD AQPHS EL WLTTRFL FG LL SA ER MR (253) VGT LL IR RD AQPHS EL WLTTRFL FG LL SA ER MR (642) -- (540) GRT NV PG SR K LP SR DV (495) ED RG HT WD I G-- HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	701 IEP HF GC M S ER V KQEA LR WV Q QGQGCPGV VA PEV TE GAK GL ED TE EE (293) IEP HF GC M S ER V KQEA LR WV Q QGQGCPGV VA PEV TE GAK GL ED TE EE (686) MEN IF HC RI SQ -- GRNL M OW V PSL -- (590) LE KK SCK I S QQ IR EL KW EVK -- (541) LE ATE GC RM S PD TI KQ ELL RCD IS -- HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	750 IEP HF GC M S ER V KQEA LR WV Q QGQGCPGV VA PEV TE GAK GL ED TE EE (293) IEP HF GC M S ER V KQEA LR WV Q QGQGCPGV VA PEV TE GAK GL ED TE EE (686) MEN IF HC RI SQ -- GRNL M OW V PSL -- (590) LE KK SCK I S QQ IR EL KW EVK -- (541) LE ATE GC RM S PD TI KQ ELL RCD IS -- HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site
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FIG. 2B-2



751

HLRSSI1 (343) EEEGEEPNYPLELLYCLYETQEDDAFVRQALCREFPELAIQRVRFCRMDVAV
 caspase_recruitment_protein (716) -----LESLECLYETRINKTEITQMAEFEEMGMC--VETDMETLV
 cryopyrin (626) -----LELEYCLYEMQEEEDFVQRAMDVFPPKIEIN--LSTRMDHMV
 Nucleotide_Binding_site (576) -----ELLGCCLYEQEEELVKEVMAQFKEISLE--LNADVMDVYP

801

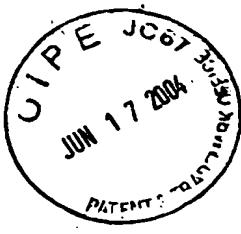
HLRSSI1 (393) LSYCVRCCPAGQALRITISCRLLVAAKEKKIKSNGKRIQASLGCGSSQ--
 caspase_recruitment_protein (754) CFCIKFESRHRVKKLQLEGRQHRSTWSPSMVVLFRWVPVTDAYWQIILFS-
 cryopyrin (664) SSFCITENCHERVESLSILGELHNMPKEEEEEEKEGRHLDMWQCVLPSSBAA
 Nucleotide_Binding_site (612) SSFCVKHCRNMQKMSILQVILKENLPEVNTASESDAEWERSQDDQHMLPFWT

851

HLRSSI1 (439) -----
 caspase_recruitment_protein (803) -----
 cryopyrin (714) CSHGTVNSH-----
 Nucleotide_Binding_site (662) DLCSITFGSNKDLIMGIAINDSFLSASILVRILCEQIASDTCHIQRVVEKNTS

800

850



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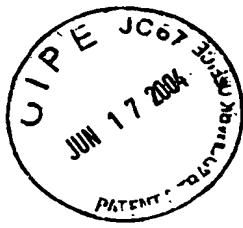
FIG. 2B-3

HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	901 (439) ----- ----- ----- ----- VLKVIRNLKELDLSGNSSLSESAVKSCLCKTLRPRCLLTELRLR SSFCRGGLFSVLSQSLSLTDLSDNLSLGDDEGMRVLCETLQHPGCNIRRLW PADAHRLCIALRCHKTVTLYTLLQGNDQDDMFPA ALCEWILRHEPCNLRLYLG	950 (803) ----- ----- ----- ----- GTTKQLPASITTEPEFOAMTDPLCILSSSLT
HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	951 (468) LSHCKLEDAVCRDLSPEALRAAPALTELCLL LAGCGLTAEDCRDLSPEALRANGQ LGRCGLSHECCFDISLWISSSNQKLEW LVSCTATTQWADLSLIALEVNQSLTCVNL	1000 (844) LNRISEAGLURMLSEGIAWPK TELDLSFNVLMDAKHLQRIRQPS CCFDISLWISSSNQKLEW WELDLSDNNAALGDFGIRLLCVGILKHL
HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	1001 (518) CRVQITVRQLPDPQ-RGLQYLVCMIRQSPALTLDISGCCOLPAPMVYLC CKLQRLLQLVSGGLTSDCCQDLASVLSASPSLKE CNLKKLWLVSSCLTSACCQDLASVLSLHS CFLQRSLIENCHLTEANCKDIAAVLVSSREILTHCLAKNPIGNTGVRKELC	1050 (894) LDIQQNNDDDMVGVRILC YGENALGDSGVAILC CFLQRSLIENCHLTEANCKDIAAVLVSSREILTHCLAKNPIGNTGVRKELC
HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site		

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FIG. 2B-4

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HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	1051 (567) AVL Q H Q G C G L Q T I S I A S V E L S E O S L O E I Q A V K R A K P D I N W I T E P A L D G H P Q (944) EGL R H P A C K I I R L G I D O T I L S D E M R O E T A L E Q E K P O L L I E S S R K P S Y M T (875) E K A K N P Q C N L Q K L G I V N S G I I S V C C S A I S S V I S T N Q N I T H I Y L R G N T I G D (862) E G L R Y P E C K I Q T I V I W N C D I T I S D G C C D I I T K I L Q E K S S L I C I D I G L N H I G V	1100 ----- 1150 ----- 1101 (617) P P K E I I F S T F - (994) P I E G G D T G E M S N S T S S L R Q R I L G S E R A A S H V A Q A N L K I I D P V S K I F P I A E I (925) K G T K I L L C E G I L H P D C K L Q V L E I D N C N I T S H C C W D I L S I I I T S S Q S I R K I S I (912) K G M K F E L C E A I R K P L C M N L R C I W L W G C S T P P E S C E D L C S A I S N - Q S I V T I D I L	1151 ----- 1200 ----- HLRSSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site	(626) (1044) A E E S S P E N V V P V E T T C V P S P A S Q G D L H T K P L G T D D D E W G P T G P V A T E V W D K (975) G N N - - - D I G D I G V M M F C E V I K Q Q S C L I Q N L G L S E M Y E T K S A L E T I Q E (961) G Q N - - - P I G S S G V K M I F E T I C S S G T I R T R E K I D D E N L K I L E E T E E
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FIG. 2C-1

1201

HLRSSI1 (626)
caspase_recruitment_protein (1094)
cryopyrin (1022)
Nucleotide_Binding_site (1008)

EKNLYRVH~~F~~FPVAGSM~~W~~RWPNT~~G~~LCF~~W~~REAVTVEIEFCVWWDQFLGEINPQH
EKPEITVVFEP~~W~~
KNPQIITDTEKHHPM~~W~~AERP~~S~~SHDF~~M~~

1201

HLRSSI1 (626)
caspase_recruitment_protein (1144)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

SMTVAGPILLDIAEPGAAVEAVHLPHFVALQGGHVDTSLFQVAHFKEEGML

1250

HLRSSI1 (626)
caspase_recruitment_protein (1194)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

LEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRLHP

1251

HLRSSI1 (626)
caspase_recruitment_protein (1194)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

LEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRLHP

1300

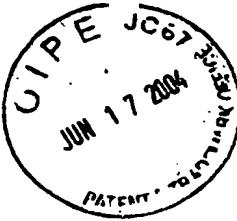
HLRSSI1 (626)
caspase_recruitment_protein (1194)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

LEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRLHP

1350

HLRSSI1 (626)
caspase_recruitment_protein (1194)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

LEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRLHP





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FIG. 2C-2

1351 1400

HLRSS11 (626) EEVTFHLYLIPSDCSIRKELELCYRSPGEDOLFSEFFYVGHILGSGIRLQVK
caspase_recruitment_protein (1244)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

1401 1450

HLRSS11 (626) DKKDETIVWEALVKPGDILMPATTLIPPACTAVPSPLDAPQLLHFVDQYRE
caspase_recruitment_protein (1294)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

1451 1500

HLRSS11 (626) QLIARVTSVEVVLDKLHGQVLSSEQYERVLAENTRPSQMRKLFSLSQSWD
caspase_recruitment_protein (1344)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

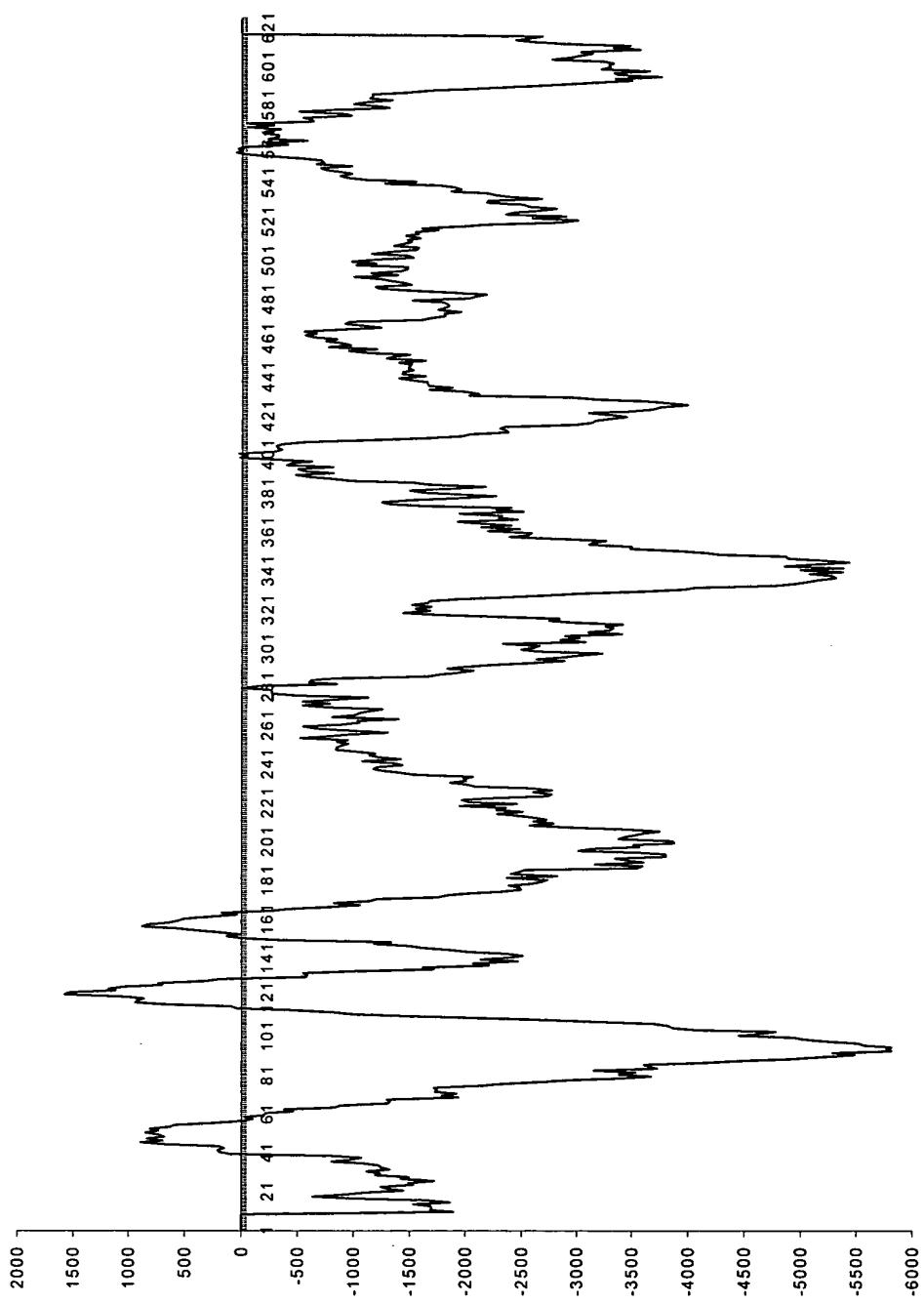
1501 1536

HLRSS11 (626) RKCKDGLYQALKETHPHLIMELWEKGSSKKGLLPLSS
caspase_recruitment_protein (1394)
cryopyrin (1035)
Nucleotide_Binding_site (1034)

D0066 NP.

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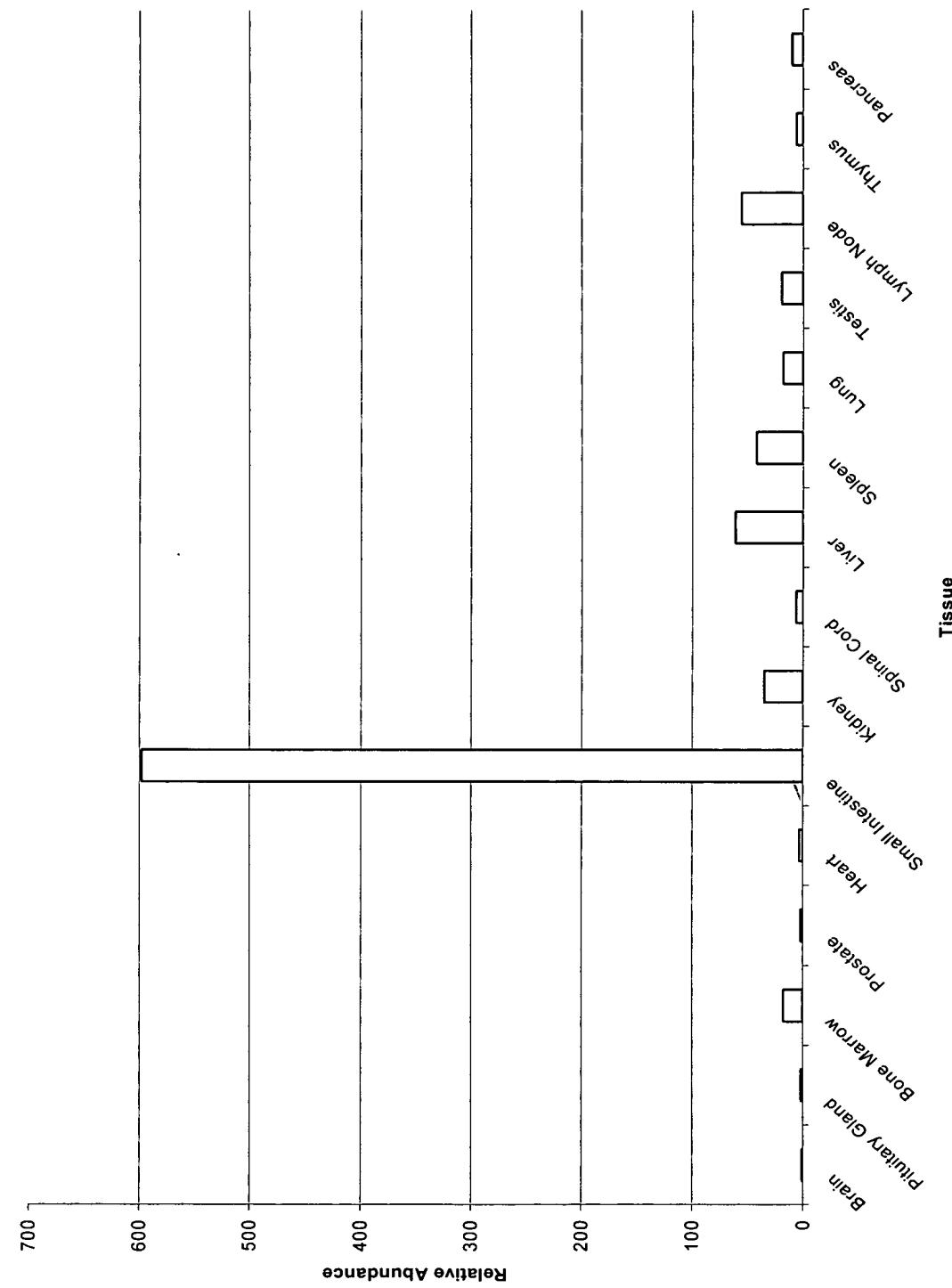
FIG. 3



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FIG. 4





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FIG. 5

Protein	Genbank ID	Identities	Similarities
human caspase recruitment protein 7	gi 10198209	36.3%	44.0%
human nucleotide binding site protein	gi 10198207	35.0%	42.2%
human cryopyrin protein	gi 17027237	35.7%	46.0%